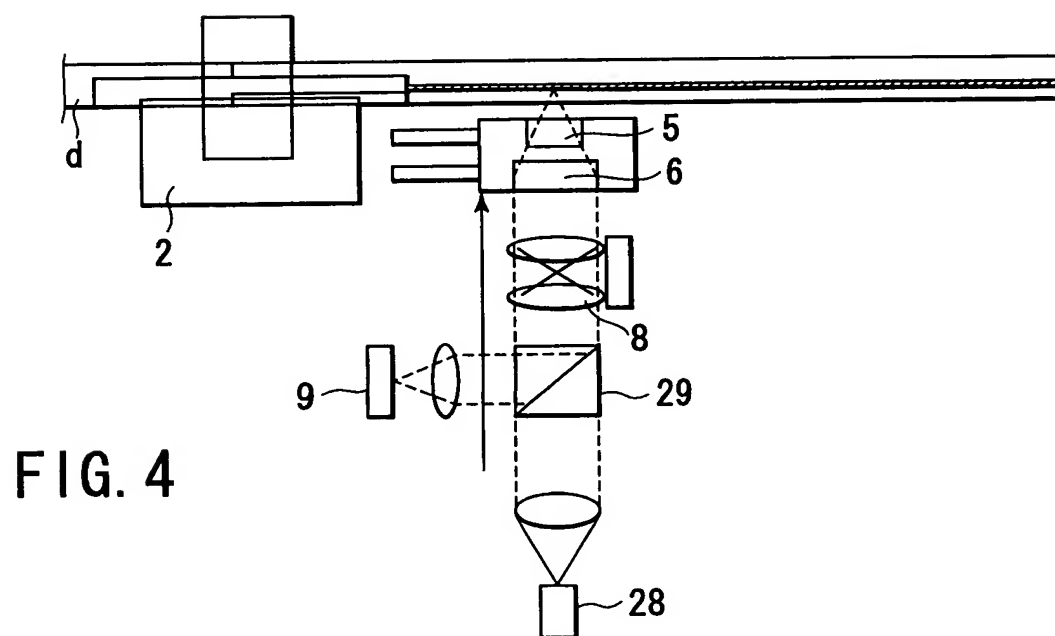
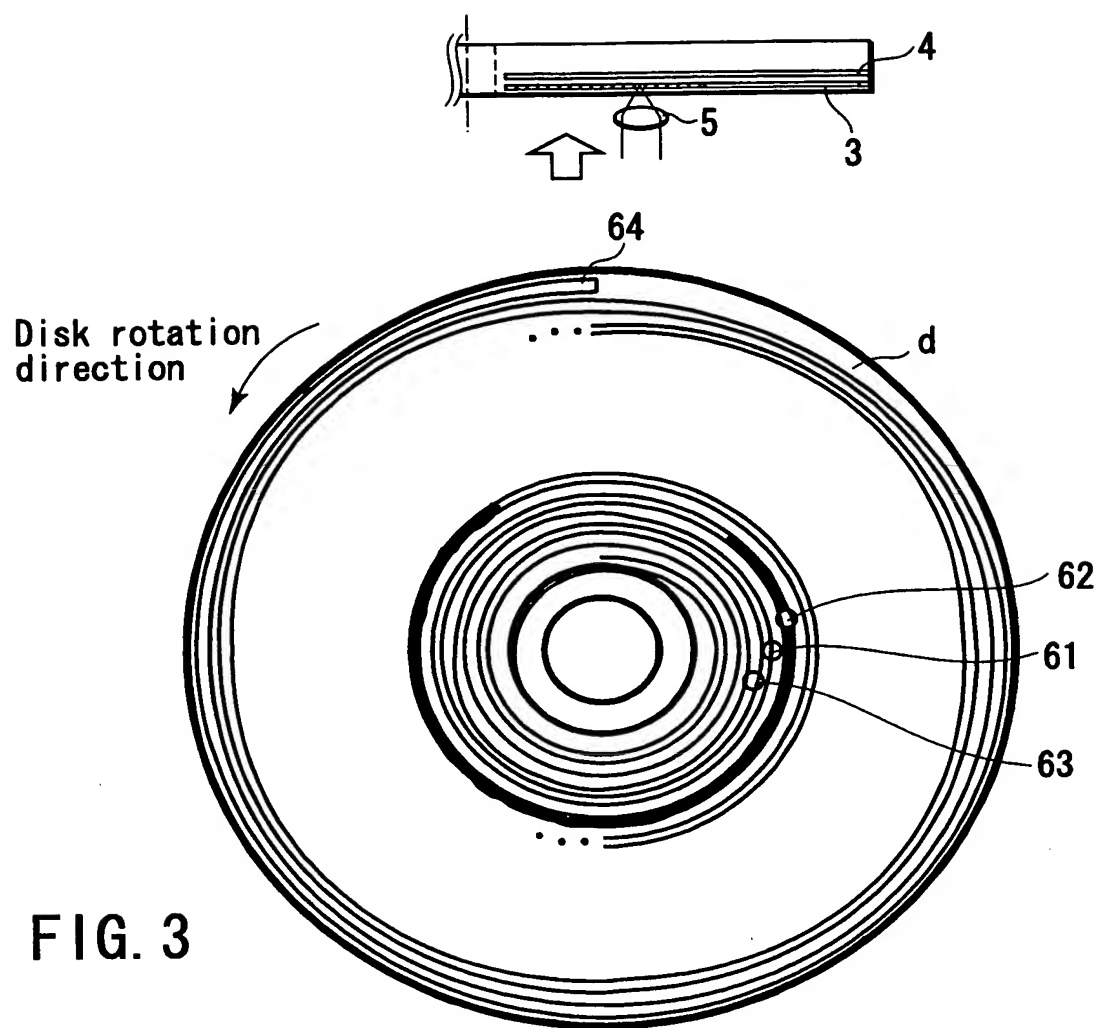


FIG. 2



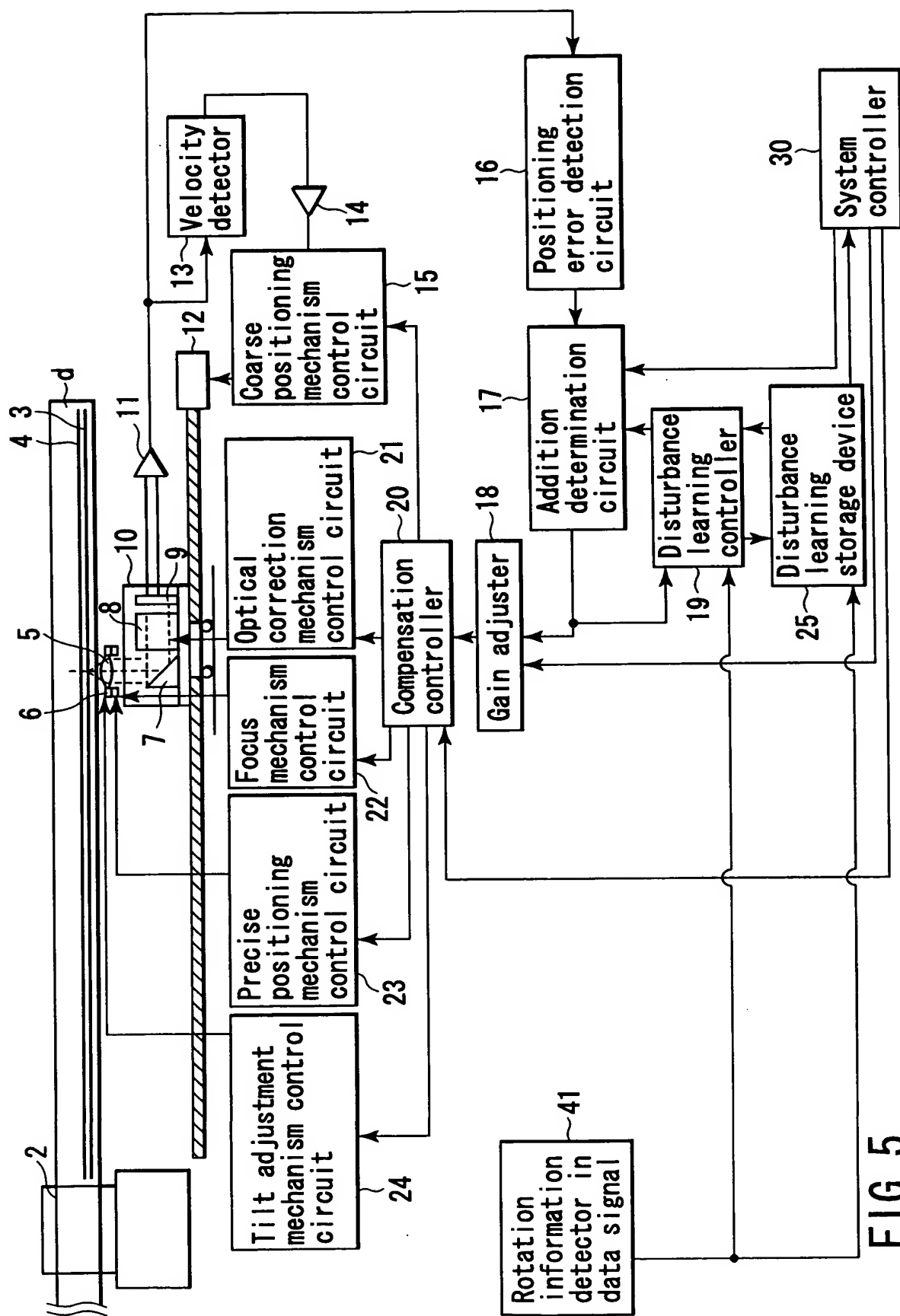


FIG. 5

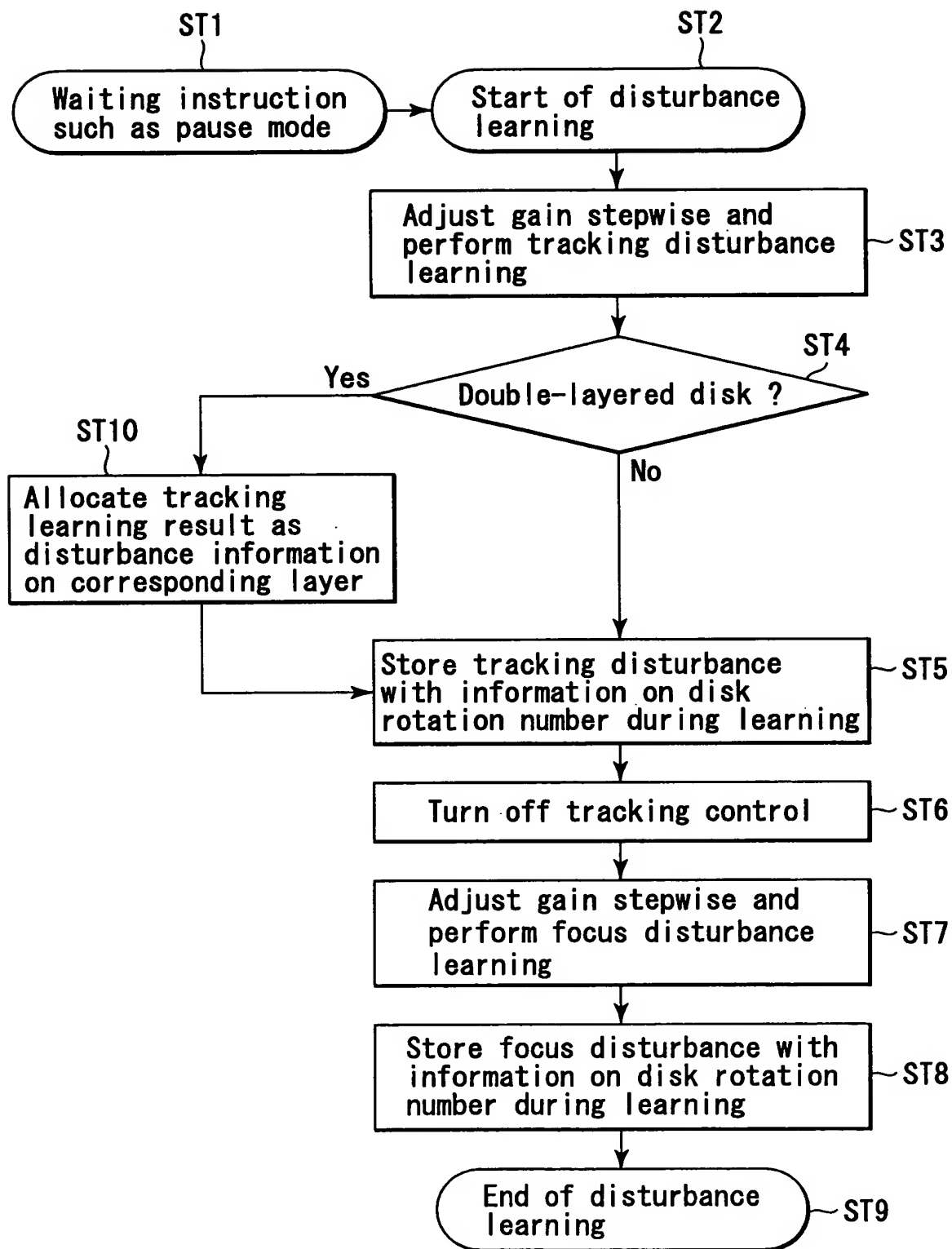


FIG. 6

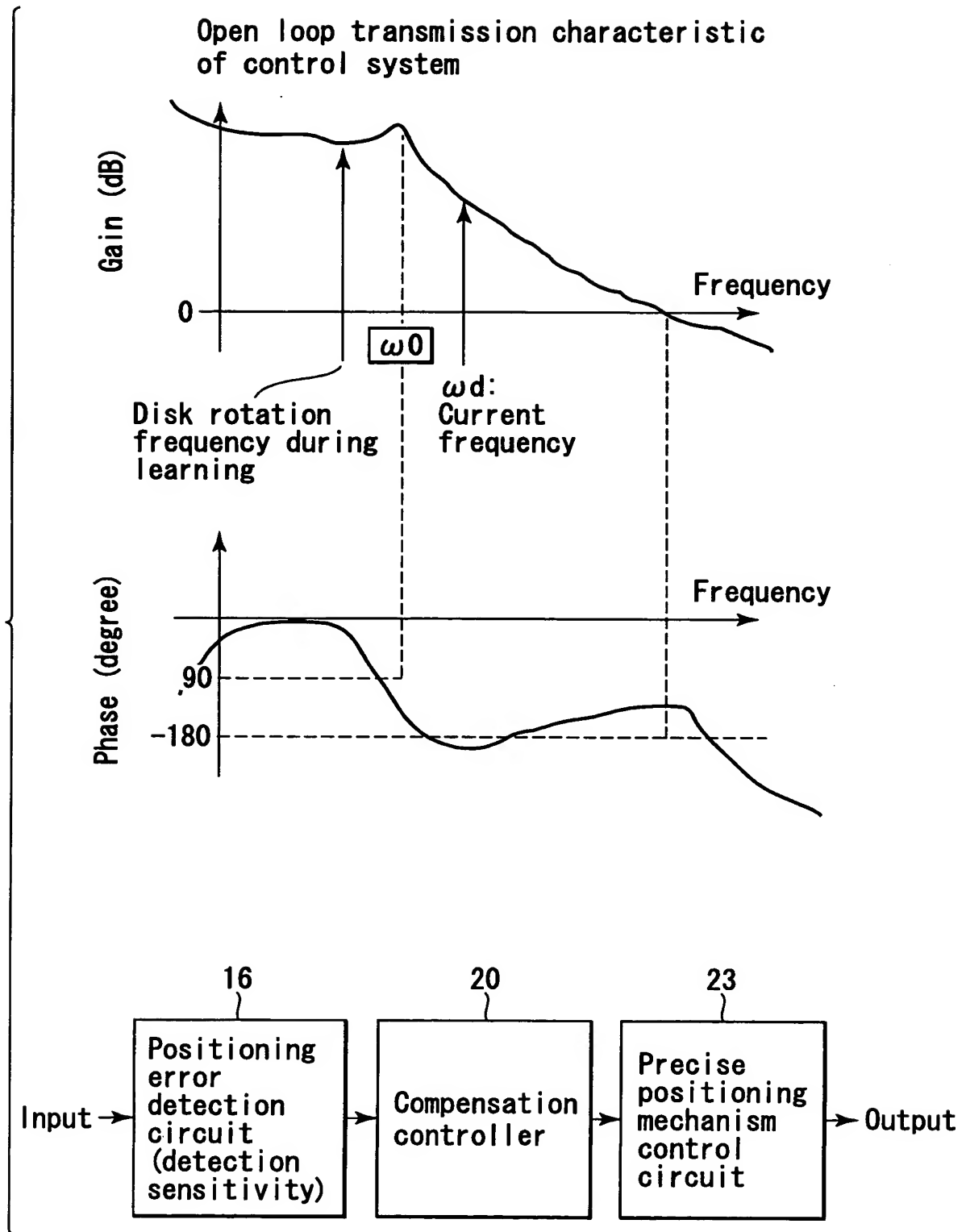


FIG. 7

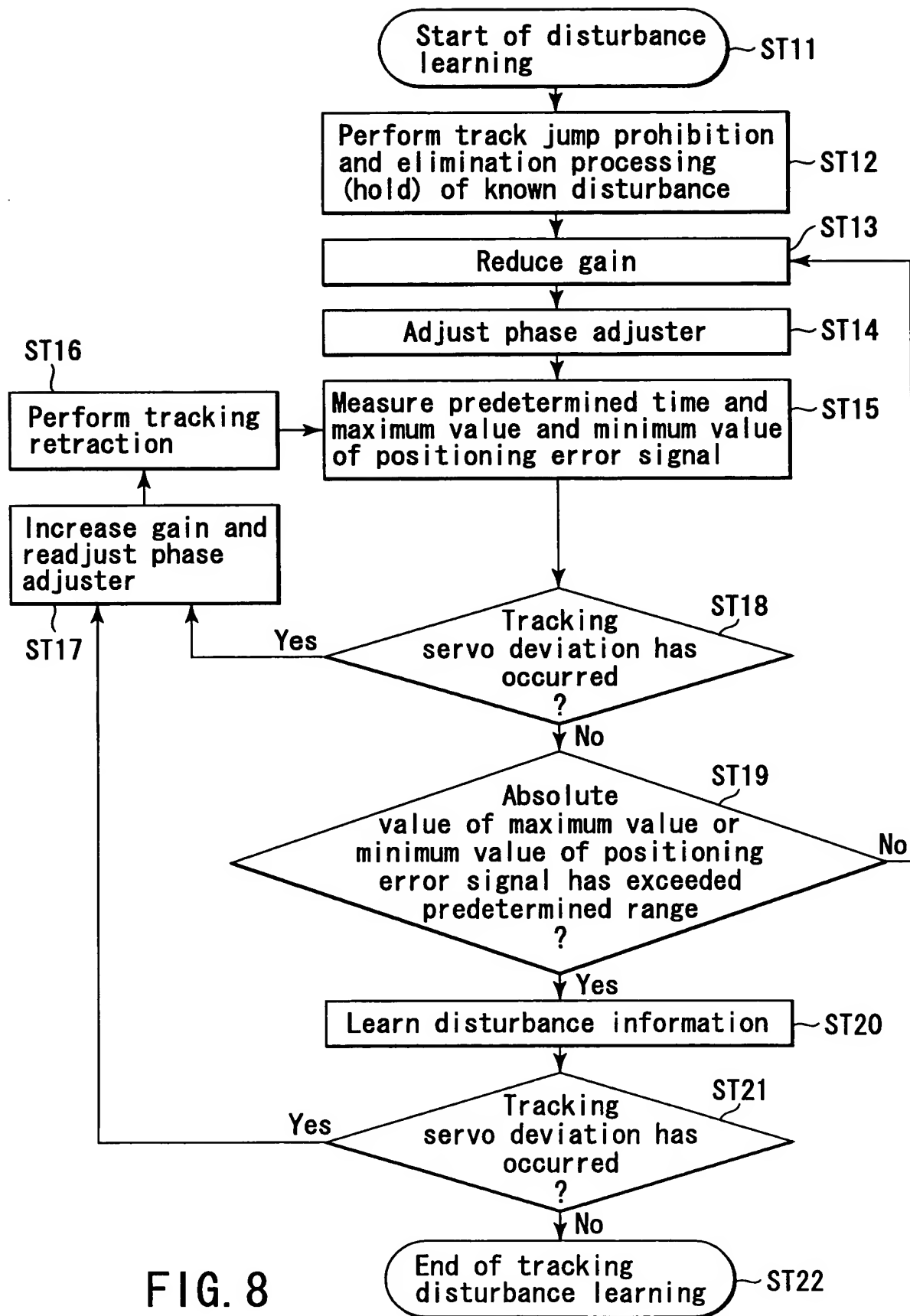


FIG. 8

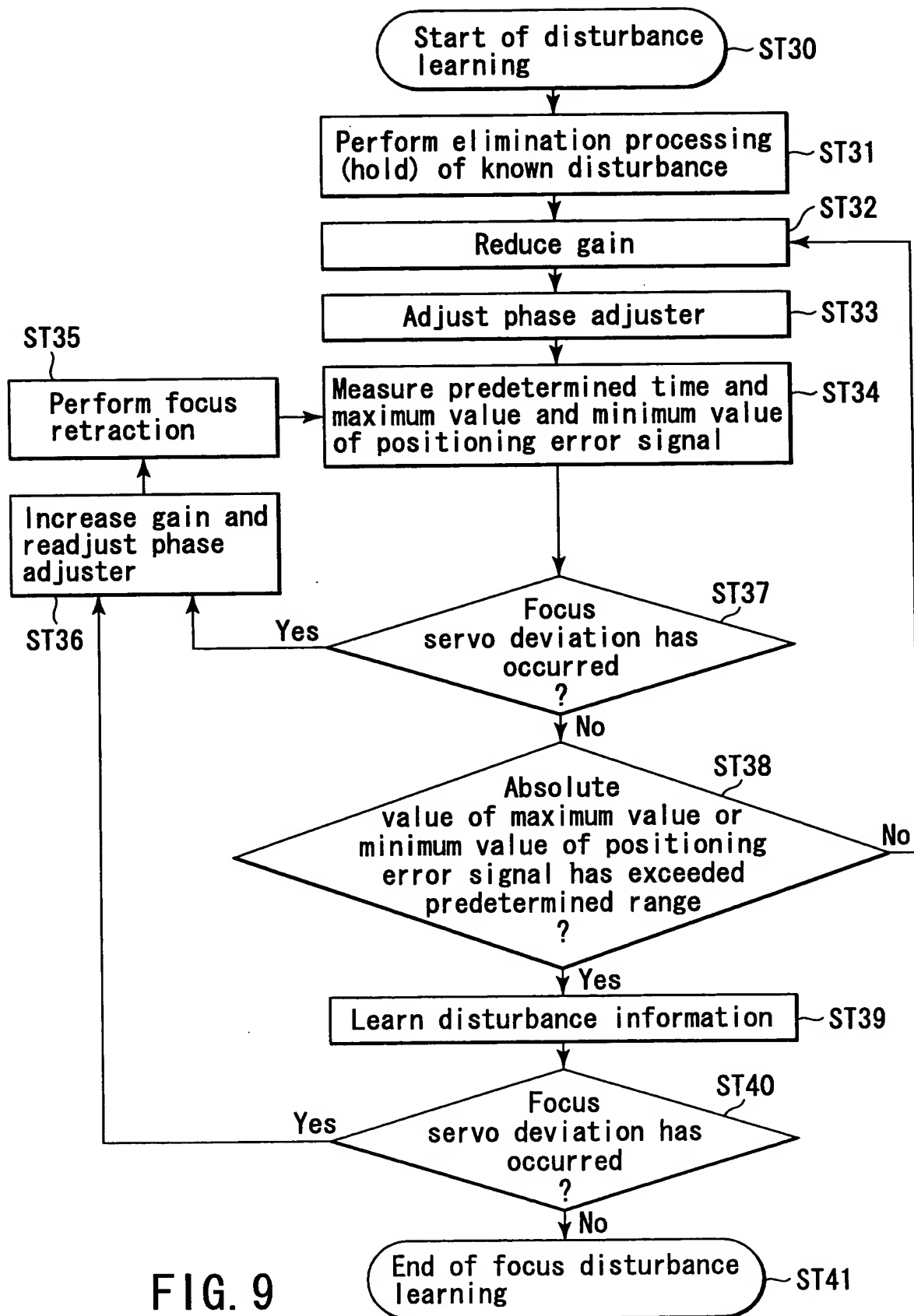


FIG. 9

Open loop transmission characteristic of control system

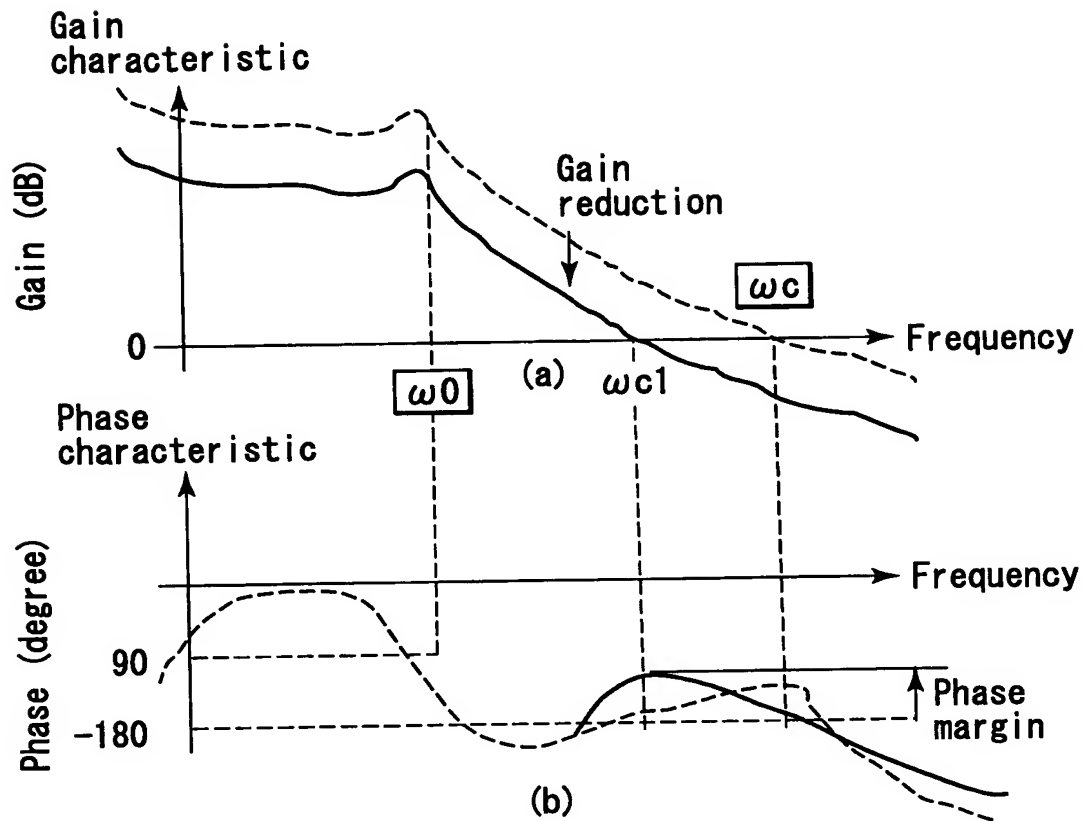


FIG. 10

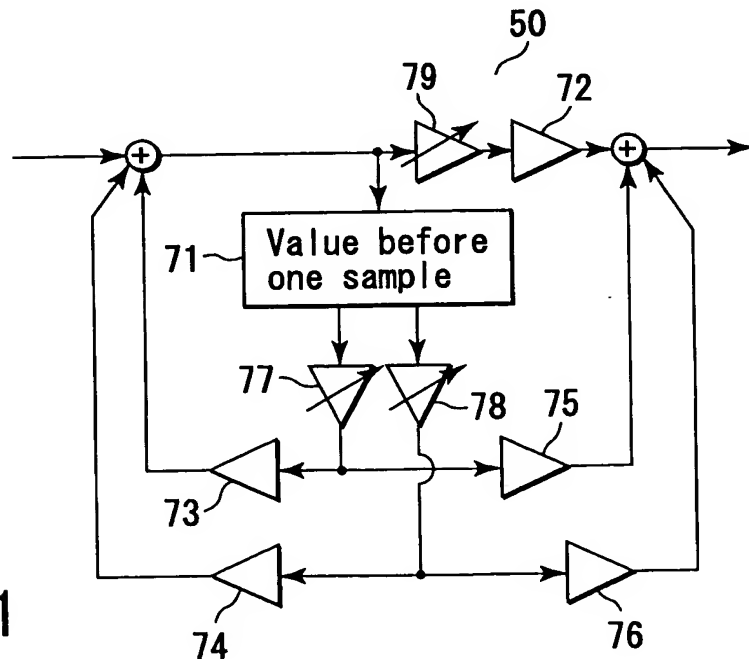
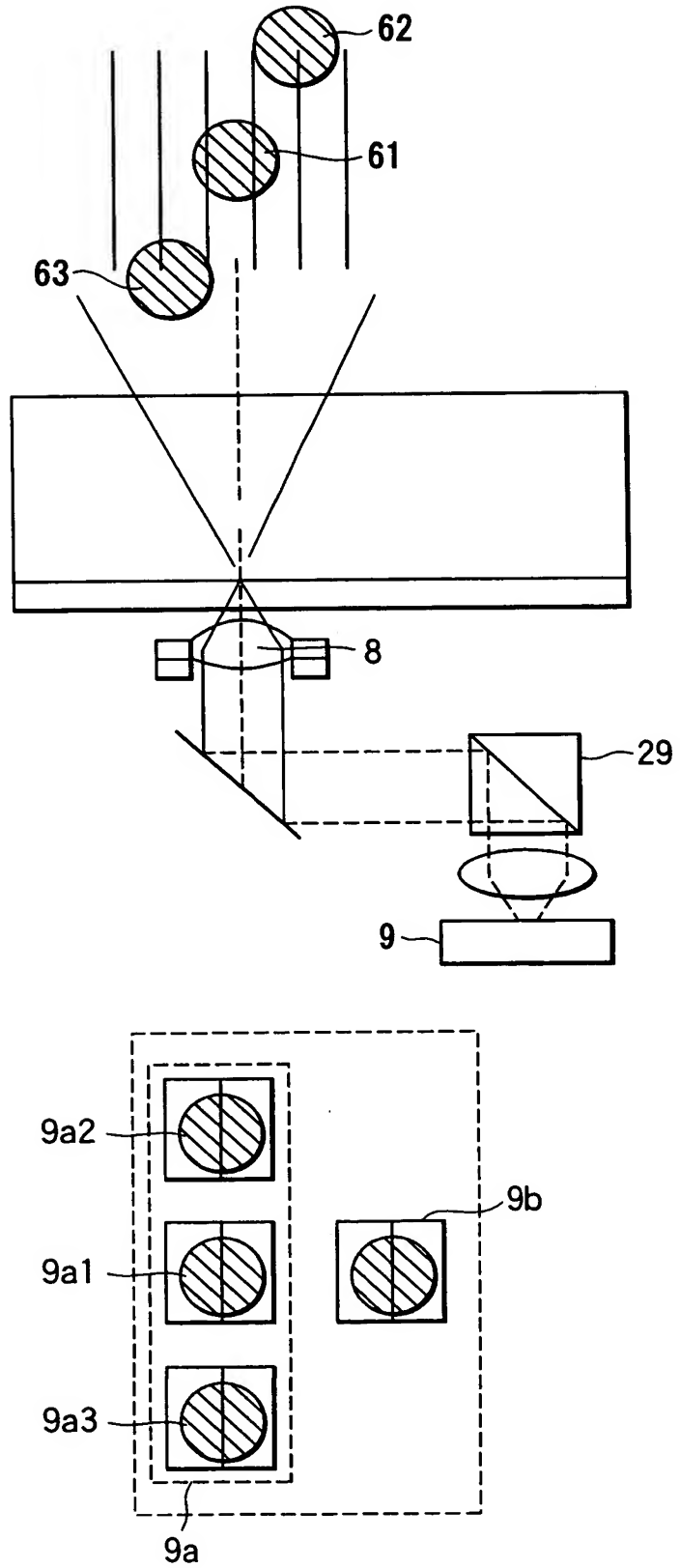
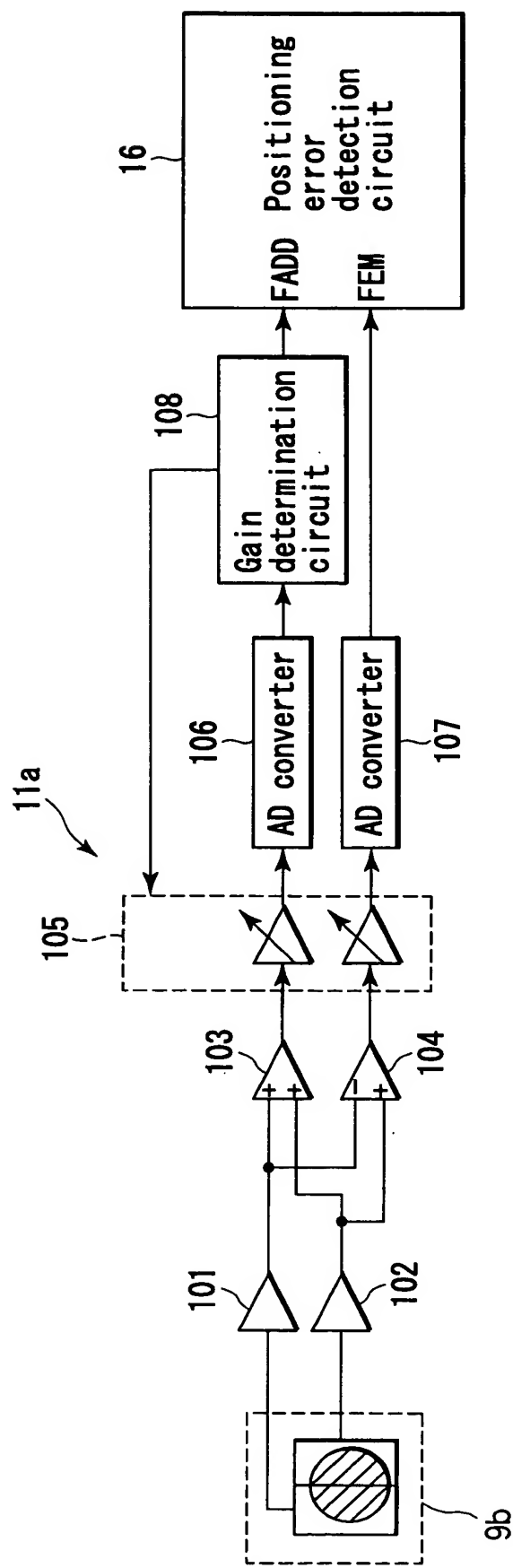


FIG. 11

FIG. 12





Normal:FES (focus positioning error signal) = FEM

FIG. 13

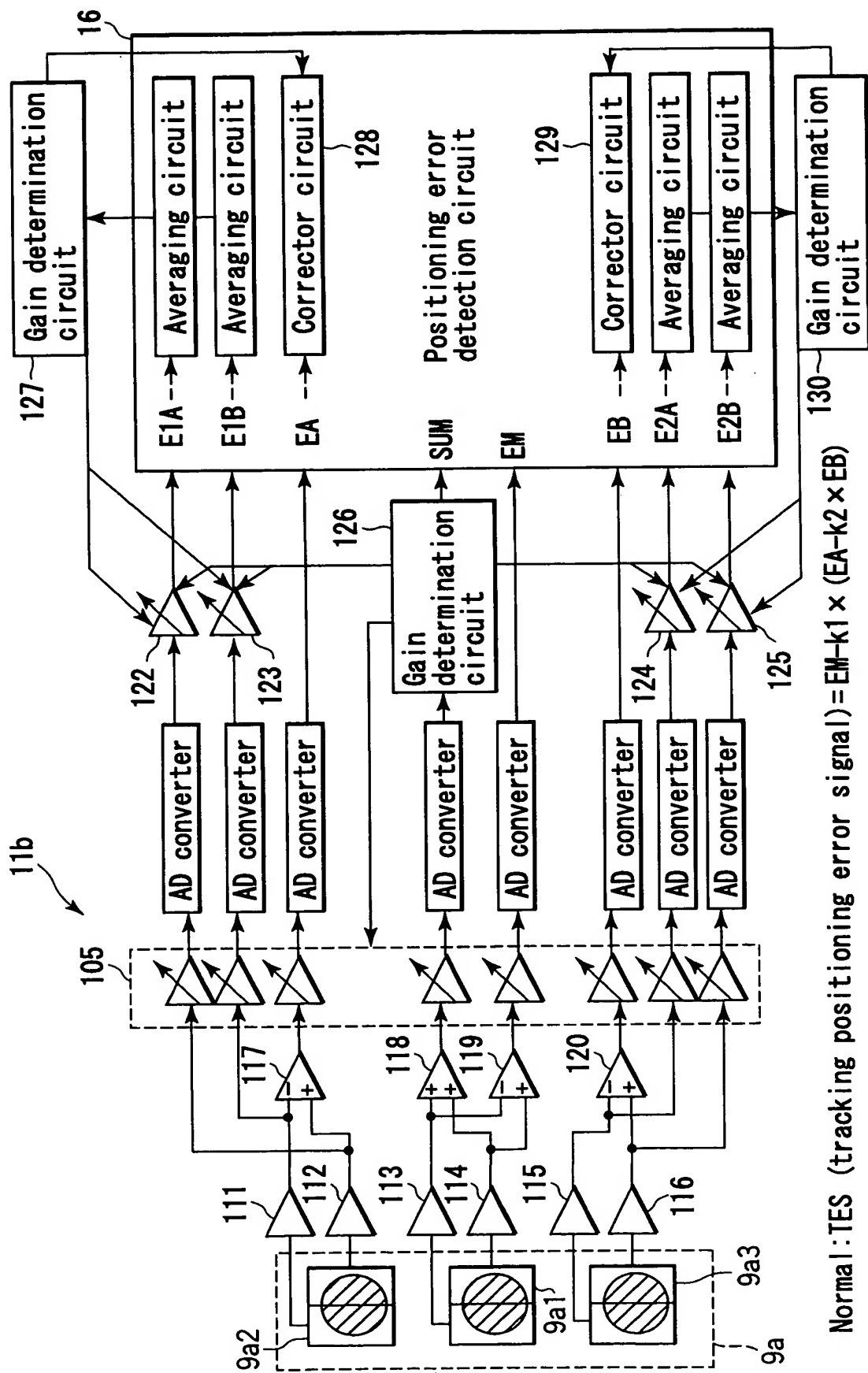


FIG. 14

In the case where gain has increased

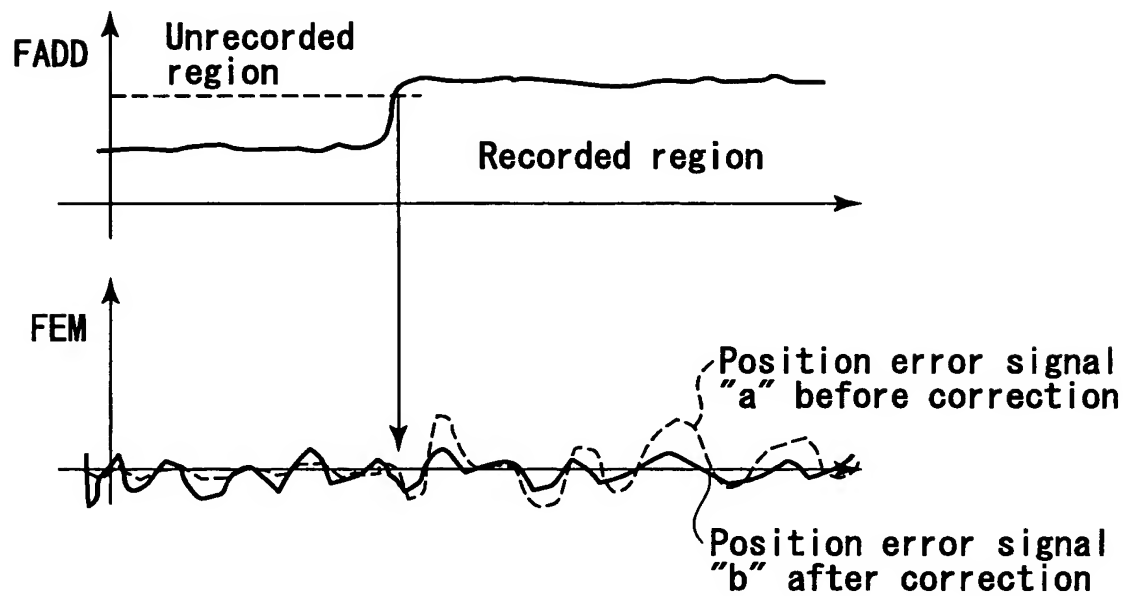


FIG. 15

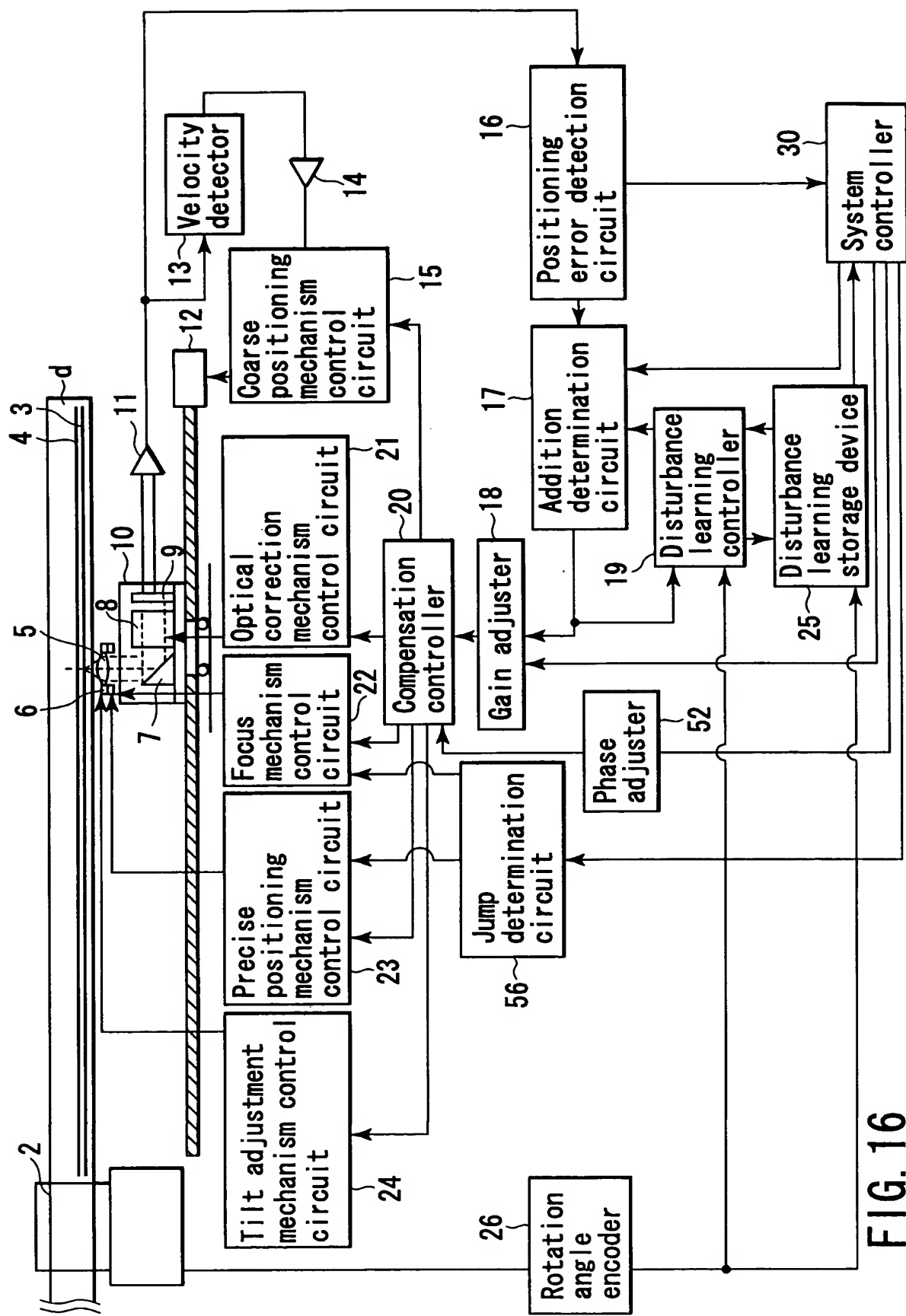


FIG. 16

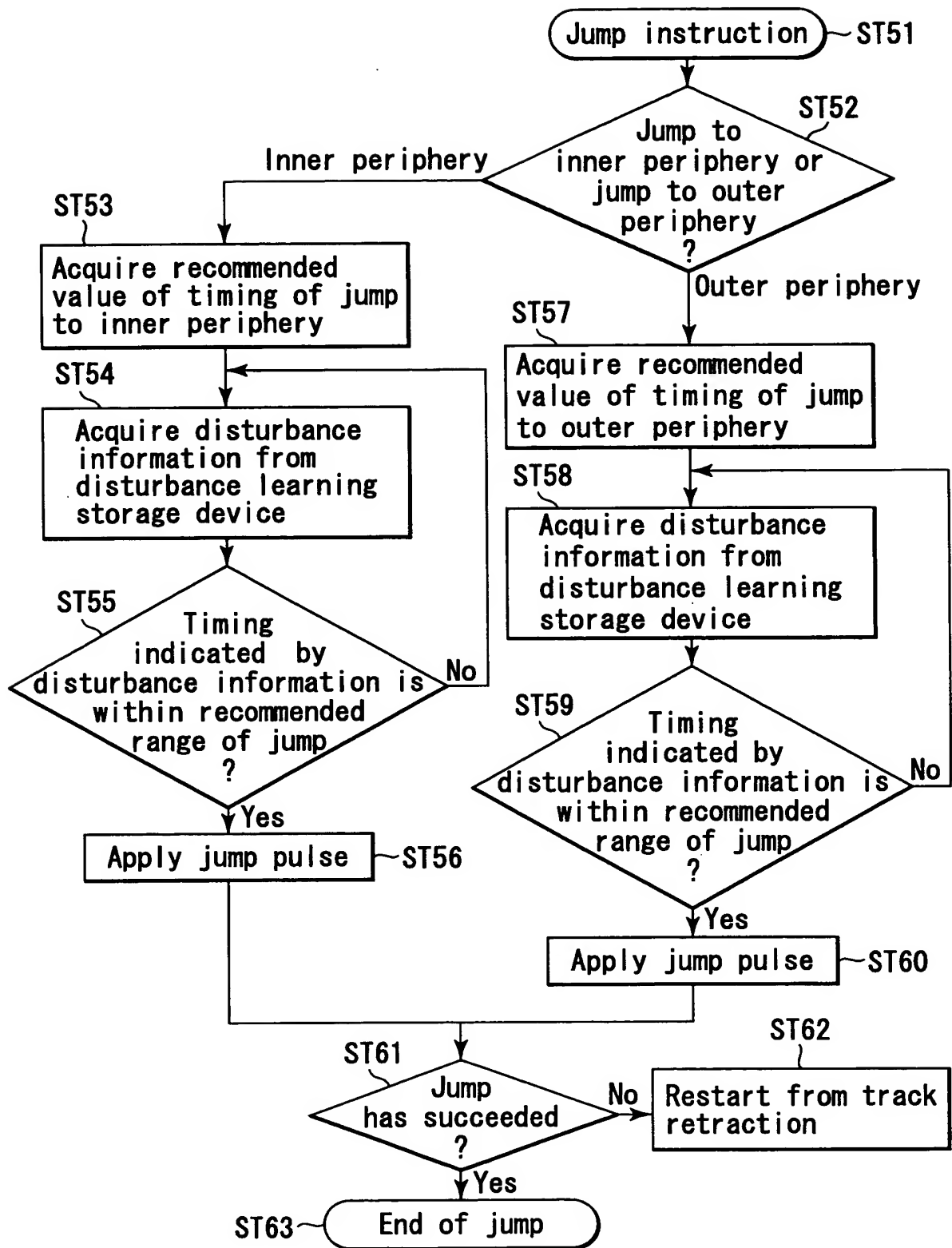


FIG. 17

Learned disturbance information
(in the case of eccentricity)

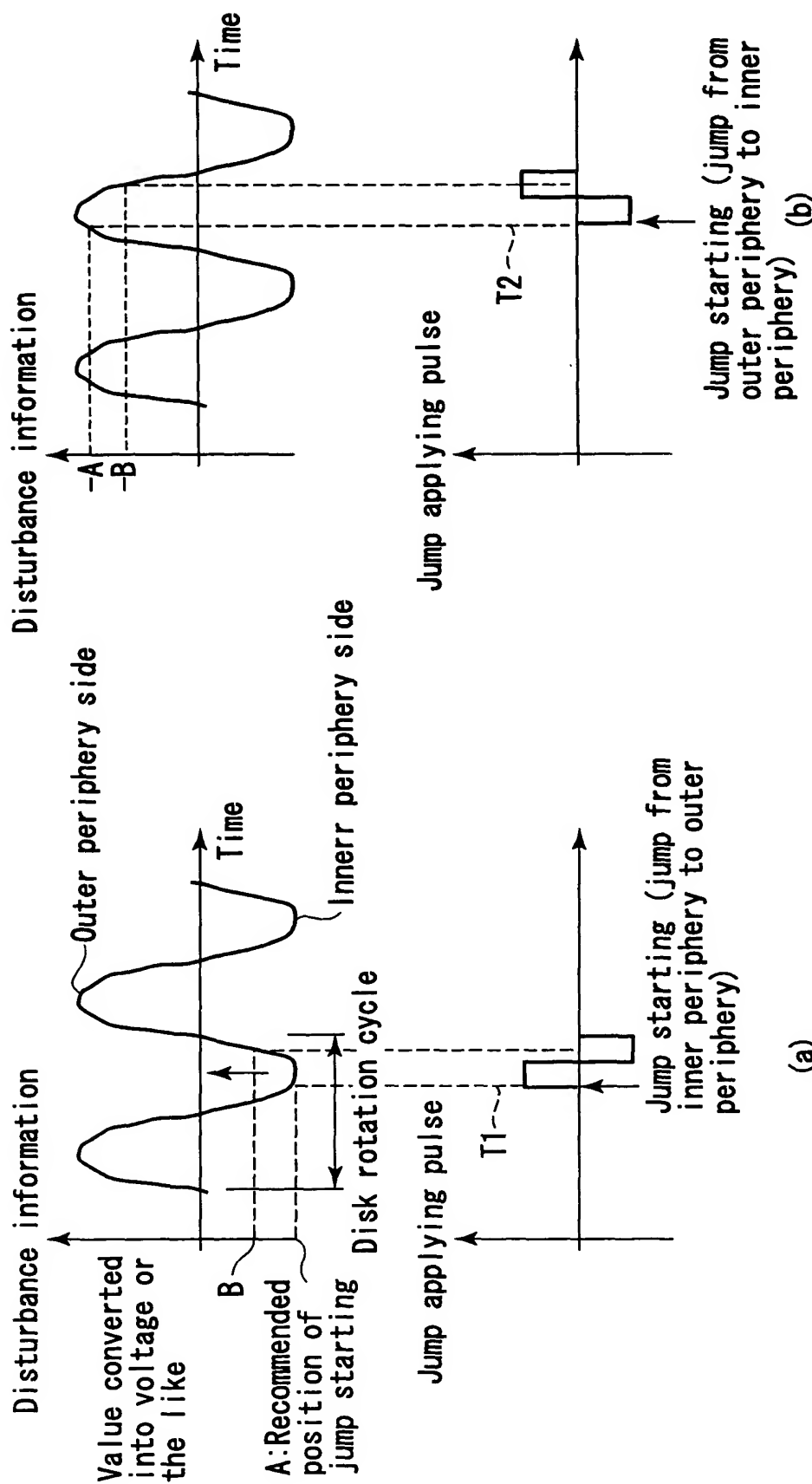


FIG. 18

Learned disturbance information
(in the case of side runoff)

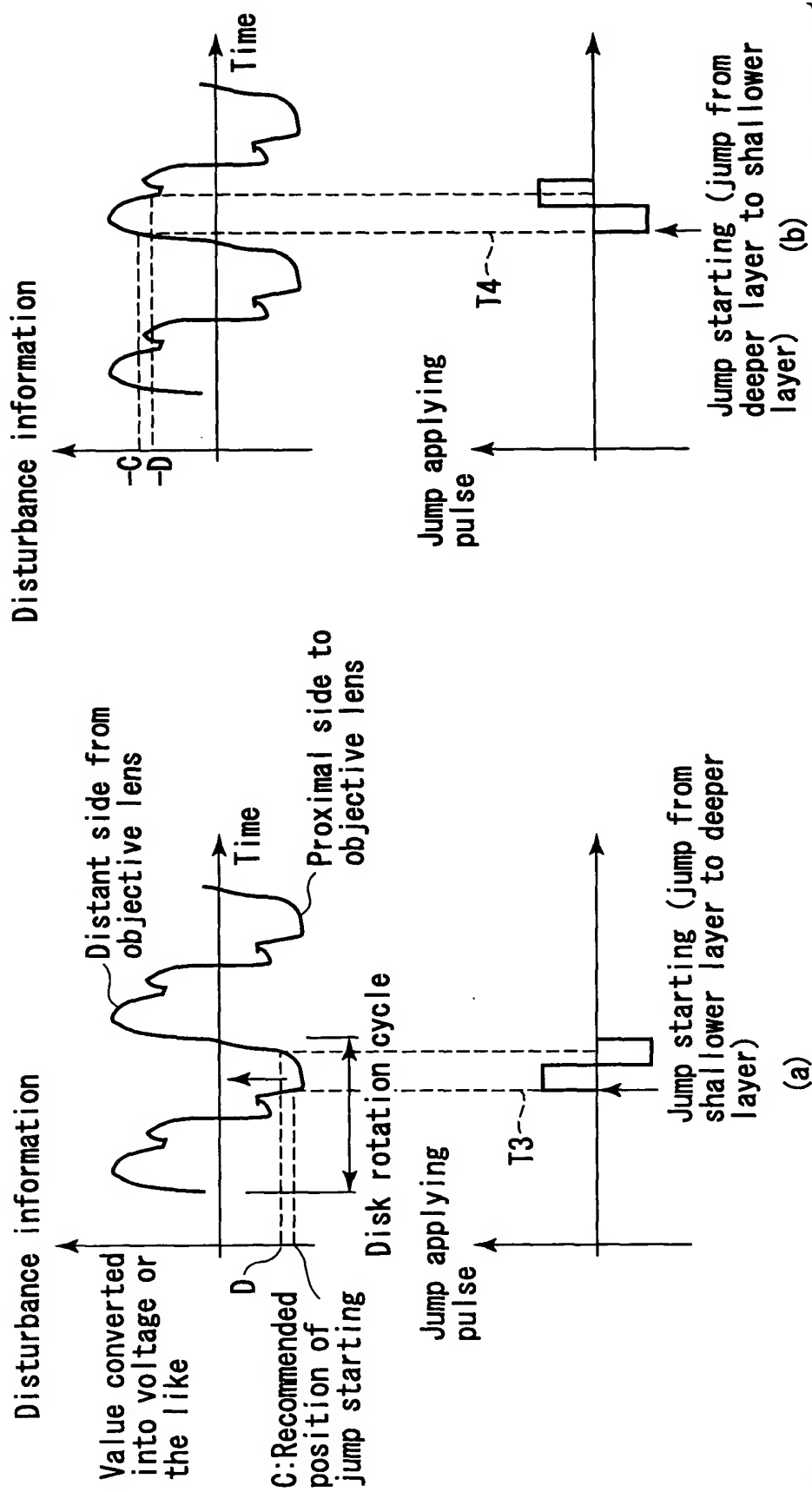


FIG. 19

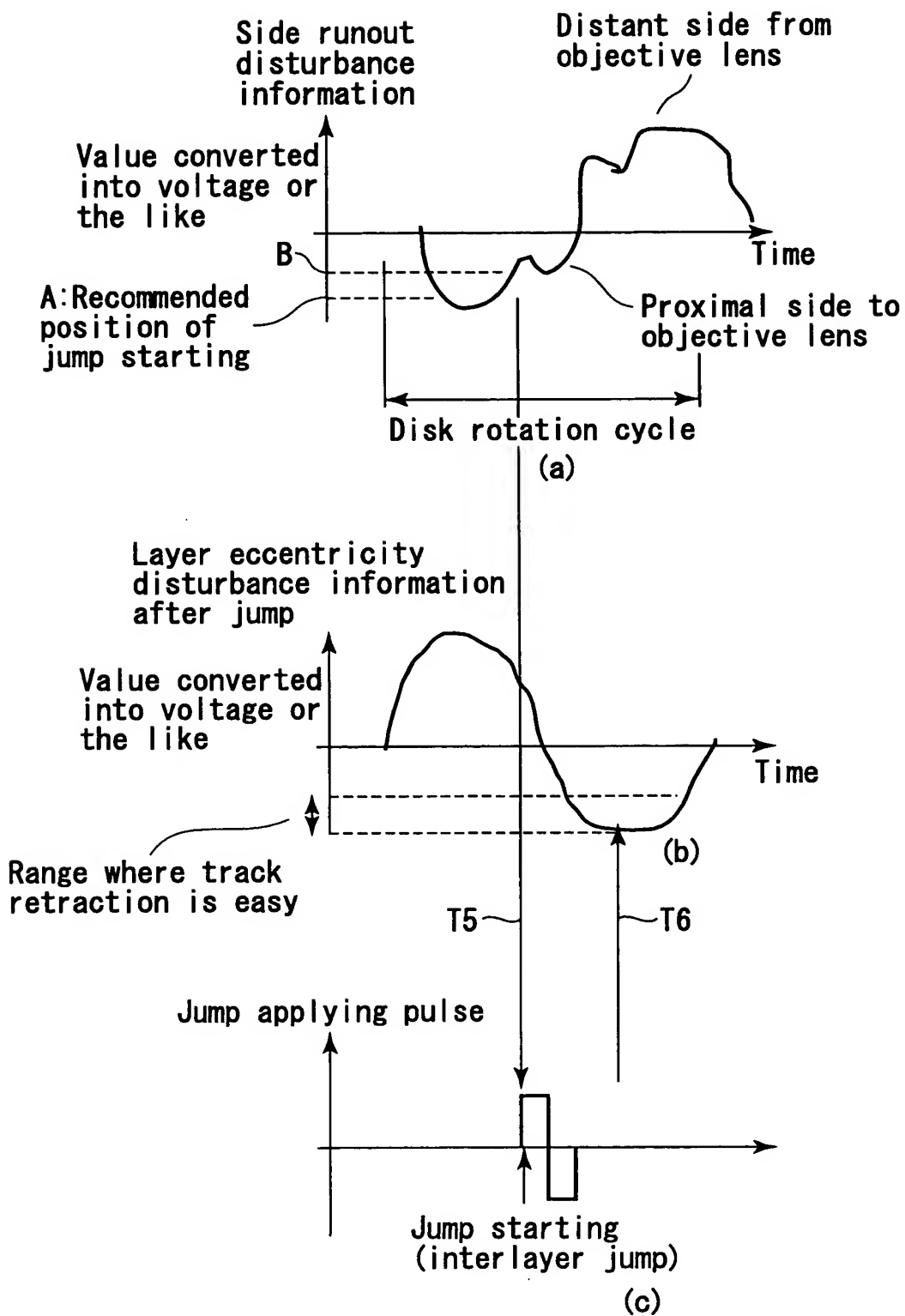


FIG. 20

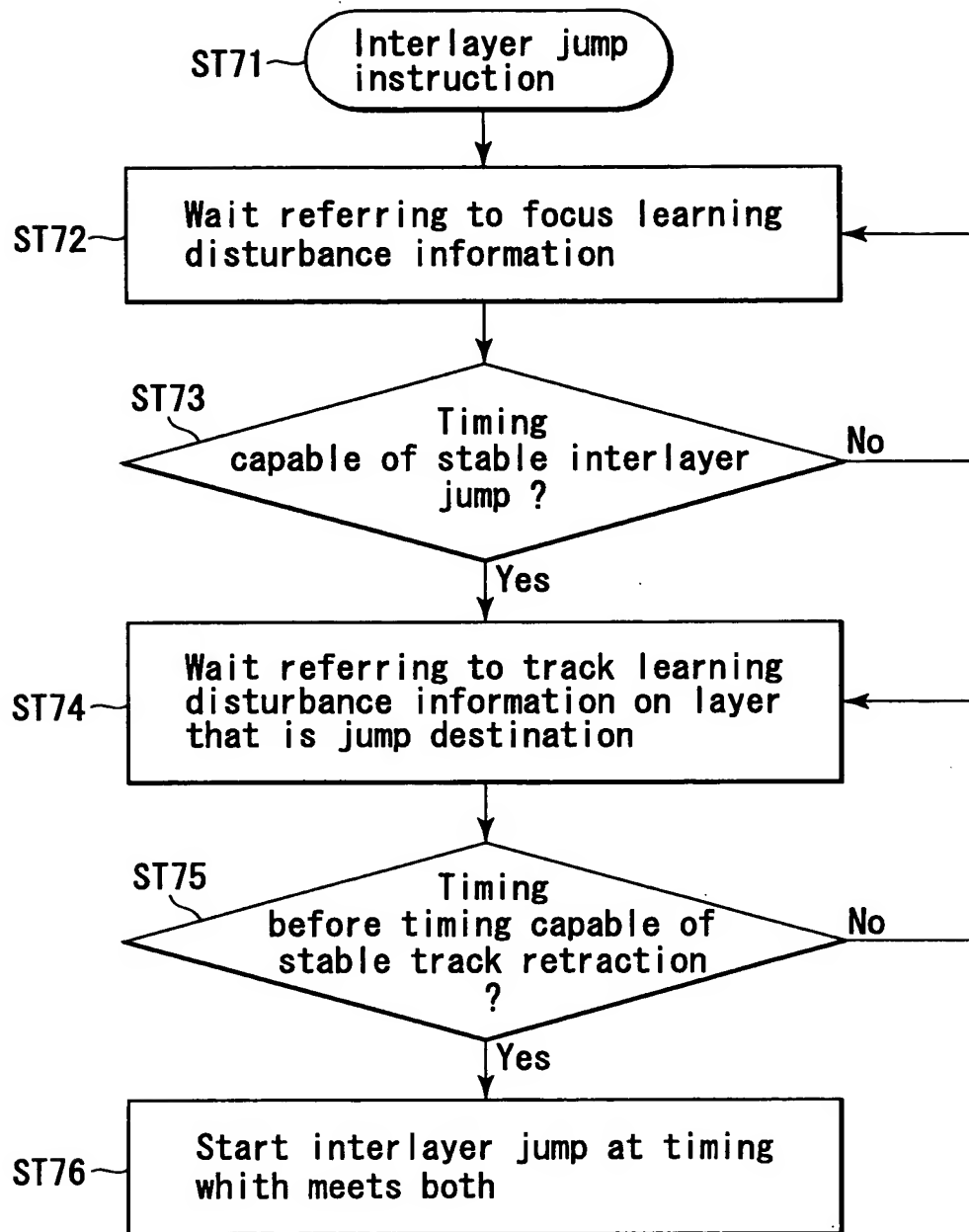


FIG. 21

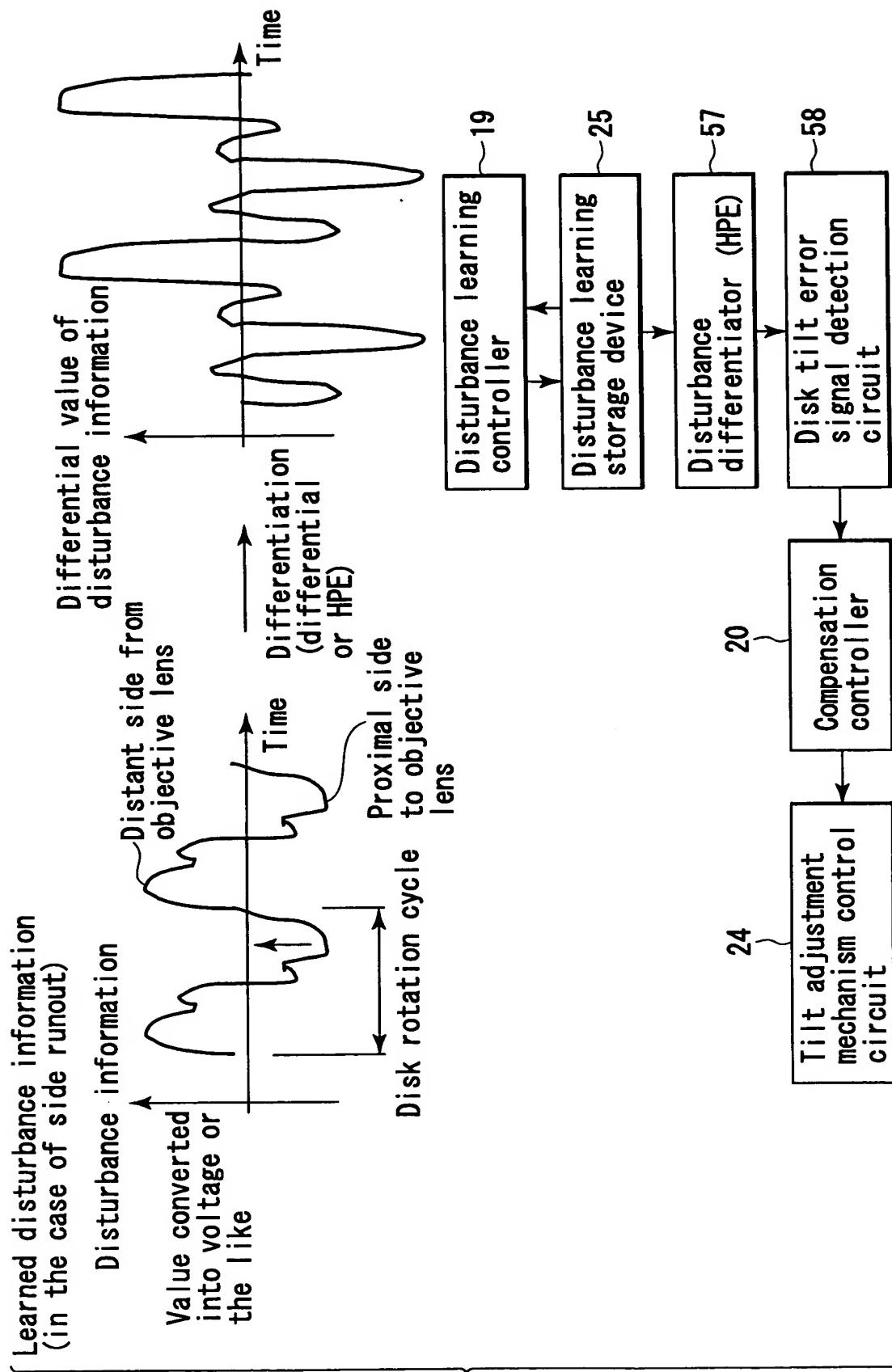


FIG. 22

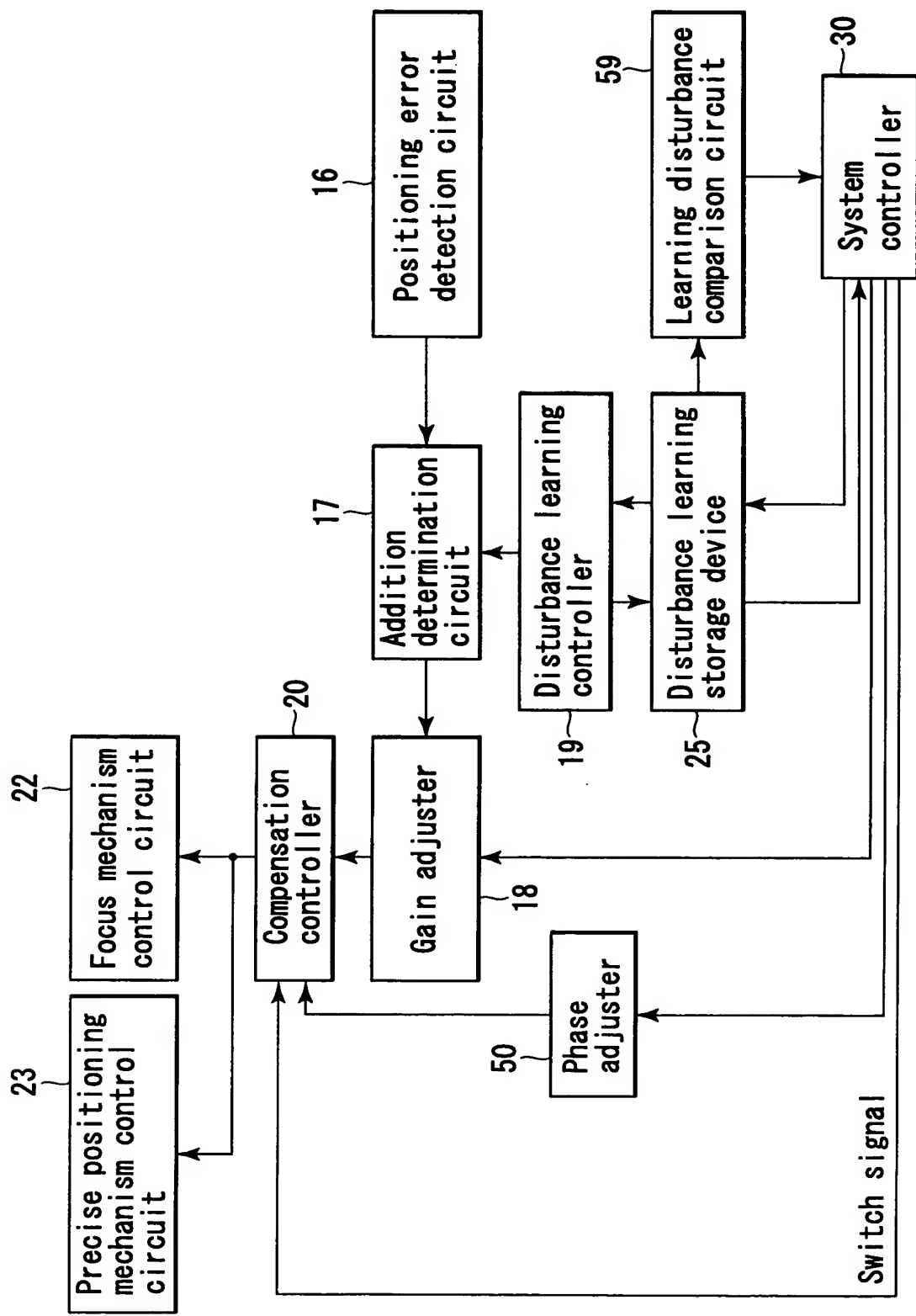


FIG. 23

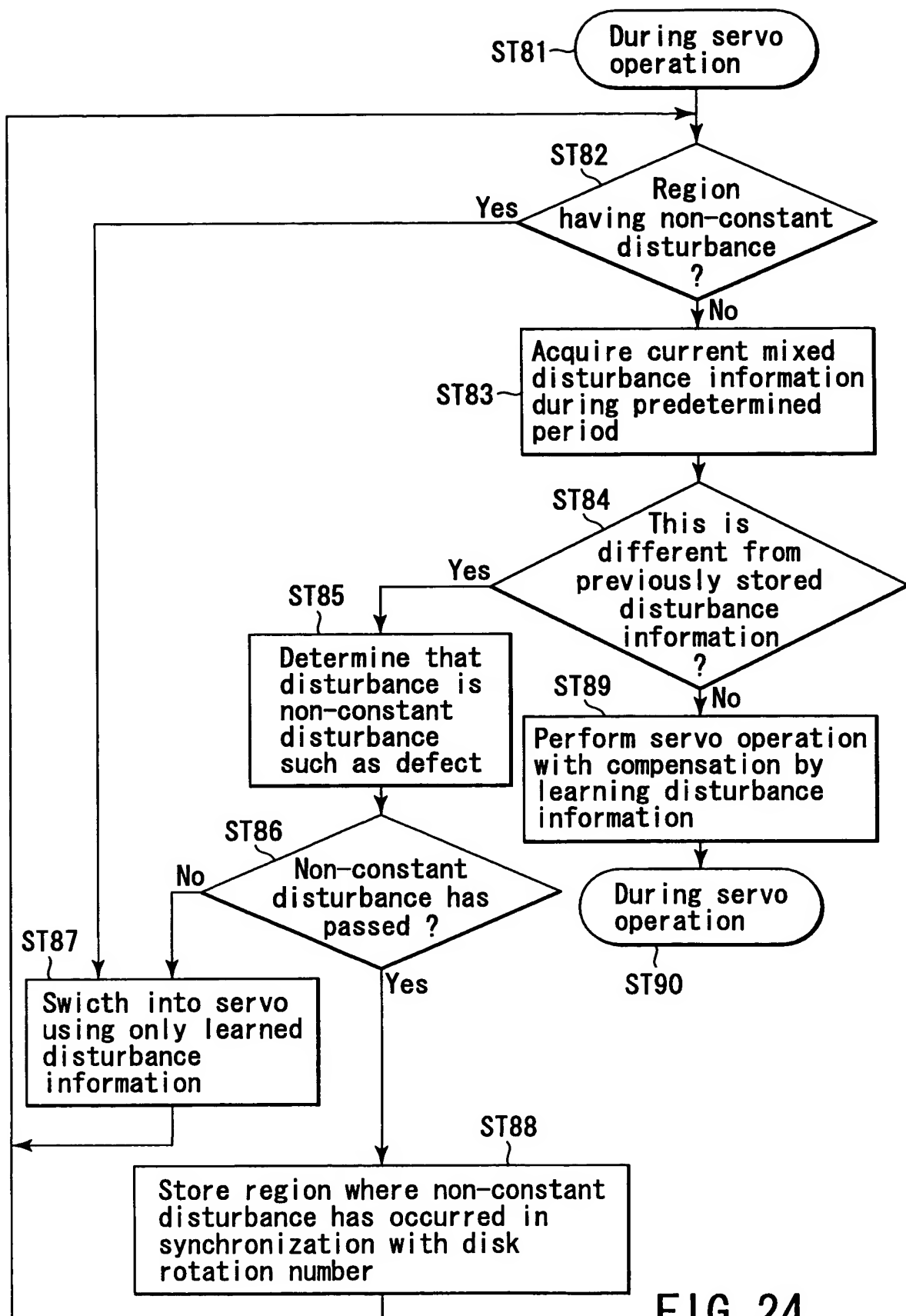


FIG. 24

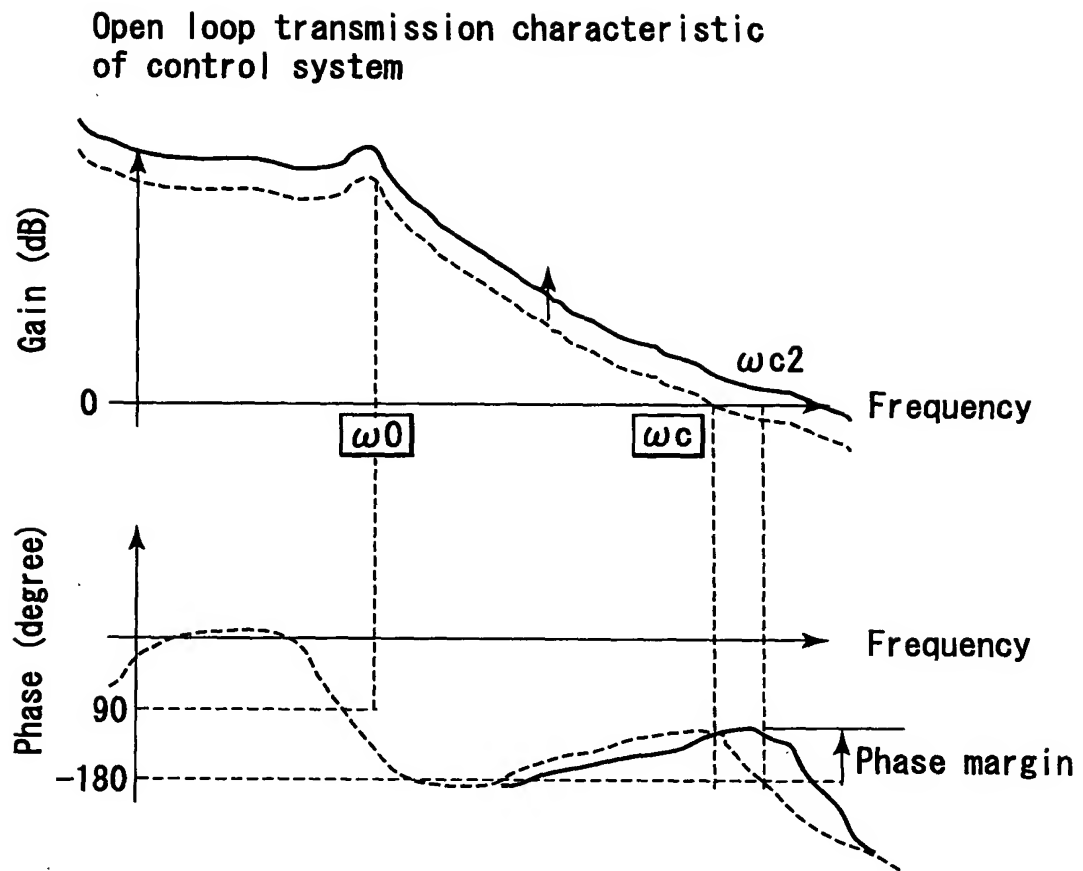


FIG. 25